SEQ ID NO '18

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13

End of Result Set

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L2: Entry 1 of 1 File: USPT Feb 16, 1999

US-PAT-NO: 5872215
DOCUMENT-IDENTIFIER: US 5872215 A

TITLE: Specific binding members, materials and methods

DATE-ISSUED: February 16, 1999

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Osbourne; Jane Katharine	Cambridge			GBX
Allen; Deborah Julie	London			GBX
McCafferty; John Gerald	Babraham			GBX

ASSIGNEE-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY	TYPE CODE
Medical Research Council	London			GB2	03
Cambridge Antibody Technology Ltd.	Cambridgeshire			GB2	03

APPL-NO: 8/ 652816
DATE FILED: May 23, 1996

PARENT-CASE:
CROSS-REFERENCE TO RELATED APPLICATION This application is a continuation-in-part of U.S. patent application Ser. No. 08/244,597, still pending, filed on Jun. 1, 1994, which is the U.S. National Phase of PCT/GB92/02240.

FOREIGN-APPL-PRIORITY-DATA:

COUNTRY	APPL-NO	APPL-DATE
GB	9125582	December 2, 1991
GB	9125579	December 4, 1991
GB	9206318	March 24, 1992
GB	9206372	September 23, 1992
GB	9525004	December 7, 1995
GB	9610824	May 23, 1996

INT-CL: [6] C12P 21/08, C07K 16/32, G01N 33/574
US-CL-ISSUED: 530/387.3; 530/387.5, 530/387.7, 530/388.15, 530/388.85, 530/389.7, 530/391.3, 435/7.23
US-CL-CURRENT: 530/387.3; 435/7.23, 530/387.5, 530/387.7, 530/388.15, 530/388.85, 530/389.7, 530/391.3
FIELD-OF-SEARCH: 530/387.3, 530/387.5, 530/387.7, 530/388.15, 530/388.85, 530/389.7, 530/391.3, 435/7.23

PRIOR-ART-DISCLOSED:

FOREIGN PATENT DOCUMENTS

FOREIGN-PAT-NO	PUBN-DATE	COUNTRY	US-CL
WO 88/06630	September 1988	WOX	
WO 90/14424	November 1990	WOX	
WO 90/14430	November 1990	WOX	
WO 90/14443	November 1990	WOX	
WO 91/01990	February 1991	WOX	
WO 92/01047	January 1992	WOX	
WO 92/20791	November 1992	WOX	
WO 93/11236	June 1993	WOX	
WO 95/06067	March 1995	WOX	
WO 95/15341	June 1995	WOX	

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ART-UNIT: 164

PRIMARY-EXAMINER: Saunders; David
ASSISTANT-EXAMINER: VanderVegt; F. Pierre
ATTY-AGENT-FIRM: Marshall, O'Toole, Gerstein, Murray & Borun

ABSTRACT:

Specific binding members for human carcinoembryonic antigen (CEA) comprise a human antibody antigen binding domain. The specific binding members may have a dissociation constant less than 1.0.times.10.sup.-8 M and may be substantially non-crossreactive with human liver and/or other normal tissues. They may be specific for the A3-B3 extracellular domain of CEA. They may be specific for a carbohydrate epitope of CEA. They may be produced by recombinant expression from encoding nucleic acid and modified and manipulated in various manners in accordance with known techniques. CEA is a tumour antigen and the specific binding members have proven ability to bind and target CEA both in vitro and in vivo.

32 Claims, 42 Drawing figures

SEQ ID NO: 10

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L1: Entry 1 of 1 File: USPT Jun 25, 1996

US-PAT-NO: 5530101
DOCUMENT-IDENTIFIER: US 5530101 A

TITLE: Humanized immunoglobulins

DATE-ISSUED: June 25, 1996

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Queen; Cary L.	Los Altos	CA		
Selick; Harold E.	Belmont	CA		

ASSIGNEE-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY	TYPE CODE
Protein Design Labs, Inc.	Mountain View	CA			02

APPL-NO: 7/ 634278
DATE FILED: December 19, 1990

PARENT-CASE:
CROSS-REFERENCE TO RELATED APPLICATIONS This is a continuation-in-part application of commonly assigned patent application U.S. Ser. No. 07/590,274, filed Sep. 28, 1990 (now abandoned) and of U.S. Ser. No. 07/310,252, filed Feb. 13, 1989 (now abandoned), which is a continuation-in-part of U.S. Ser. No. 07/290,975, filed Dec. 28, 1988 (now abandoned). All of these applications are specifically incorporated herein by reference.

INT-CL: [6] A61K 39/395, C07K 16/28
US-CL-ISSUED: 530/387.3; 530/387.1, 530/388.22, 424/133.1, 424/143.1
US-CL-CURRENT: 530/387.3; 424/133.1, 424/143.1, 530/387.1, 530/388.22
FIELD-OF-SEARCH: 424/85.8, 424/133.1, 424/143.1, 530/387, 530/388.22, 530/387.1, 530/387.3

PRIOR-ART-DISCLOSED:

U.S. PATENT DOCUMENTS

Search Selected | Search ALL

	PAT-NO	ISSUE-DATE	PATENTEE-NAME	US-CL
☐	4816397	March 1989	Boss et al.	435/68
☐	4816567	March 1989	Cabilly et al.	530/387
☐	4867973	September 1989	Geers et al.	N/A
☐	5225539	July 1993	Winter	N/A

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FOREIGN-PAT-NO	PUBN-DATE	COUNTRY	US-CL
0171496	February 1986	EPX	
0173494	March 1986	EPX	
0184187	June 1986	EPX	
0239400	September 1987	EPX	
0266663	June 1988	EPX	
2188941	October 1987	GBX	
WO86/05513	September 1986	WOX	
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WO89/01783	March 1989	WOX	

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Kirkman et al. Journal of Expt. Med. vol. 162 Jul. 1985 358.
Uchiyama et al. Journal of Immunology vol. 126 No. 4 1981, 1393.

ART-UNIT: 186
PRIMARY-EXAMINER: Feisee; Lila
ATTY-AGENT-FIRM: Townsend and Townsend and Crew

ABSTRACT:

Novel methods for producing, and compositions of, humanized immunoglobulins having one or more complementarity determining regions (CDR's) and possible additional amino acids from a donor immunoglobulin and a framework region from an accepting human immunoglobulin are provided. Each humanized immunoglobulin chain will usually comprise, in addition to the CDR's, amino acids from the donor immunoglobulin framework that are, e.g., capable of interacting with the CDR's to effect binding affinity, such as one or more amino acids which are immediately adjacent to a CDR in the donor immunoglobulin or those within about 3 .ANG. as predicted by molecular modeling. The heavy and light chains may each be designed by using any one or all of various position criteria. When combined into an intact antibody, the humanized immunoglobulins of the present invention will be substantially non-immunogenic in humans and retain substantially the same affinity as the donor immunoglobulin to the antigen, such as a protein or other compound containing an epitope.

13 Claims, 80 Drawing figures

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L1: Entry 3 of 3 File: USPT Jul 30, 1996

US-PAT-NO: 5541110
DOCUMENT-IDENTIFIER: US 5541110 A

TITLE: Cloning and expression of a gene encoding bryodin 1 from Bryonia dioica

DATE-ISSUED: July 30, 1996

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Siegall; Clay B.	Edmonds	WA		

ASSIGNEE-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY	TYPE CODE
Bristol-Myers Squibb	New York	NY			02

APPL-NO: 8/ 245754
DATE FILED: May 17, 1994

INT-CL: [6] C12N 1/20, C12N 15/63, C12N 9/22, C07H 21/04, C07K 14/00
US-CL-ISSUED: 435/252.3; 435/320.1, 435/199, 536/23.2, 536/23.6, 530/350
US-CL-CURRENT: 435/252.3; 435/199, 435/320.1, 530/350, 536/23.2, 536/23.6
FIELD-OF-SEARCH: 435/69.1, 435/199, 435/320.1, 435/252.3, 536/23.2, 536/23.6, 530/350

PRIOR-ART-DISCLOSED:

FOREIGN PATENT DOCUMENTS

FOREIGN-PAT-NO	PUBN-DATE	COUNTRY	US-CL
0390040	March 1990	EPX	
2194948	August 1987	GBX	
WO91/00295	January 1991	WOX	

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F. Stirpe et al., "Bryodin, a ribosome-inactivating protein from the roots of Bryonia dioica L. (white bryony)," Biochem. J. 240:659-665, 1986.
F. Stirpe et al., "Modification of ribosomal RNA by ribosome-inactivating

proteins from plants," Nucleic Acids Research 16:1349-1357, 1988.

ART-UNIT: 184
PRIMARY-EXAMINER: Wax; Robert A.
ASSISTANT-EXAMINER: Lau; Kawai
ABSTRACT:

The molecular cloning and expression of biologically active ribosome-inactivating protein bryodin 1 are described. A complete amino acid and oligonucleotide sequence encoding bryodin 1 are also described. Further, plasmids, expression vectors comprising a nucleotide sequence encoding bryodin 1 and transformed host cells are described. Isolation and characterization of the nucleotide sequence for bryodin 1 enables the recombinant production of large amount of bryodin 1 for use. in vitro or in vivo directly or as ligand/toxin conjugates or fusion proteins. These compositions can be used to selectively kill undesired cells such as cancer cells, infected cells, bacteria.

11 Claims, 13 Drawing figures

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L3: Entry 10 of 15 File: USPT Aug 26, 1997

US-PAT-NO: 5661016
DOCUMENT-IDENTIFIER: US 5661016 A

TITLE: Transgenic non-human animals capable of producing heterologous antibodies of various isotypes

DATE-ISSUED: August 26, 1997

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Lonberg; Nils	San Francisco	CA		
Kay; Robert M.	San Francisco	CA		

ASSIGNEE-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY	TYPE CODE
GenPharm International Inc.	Palo Alto	CA			02

APPL-NO: 8/ 053131
DATE FILED: April 26, 1993

PARENT-CASE:
CROSS-REFERENCE TO RELATED APPLICATION This application is a continuation-in-part of U.S. Ser. No. 07/990,860 filed Dec. 16, 1992 now U.S. Pat. No. 5,545,806 which is a continuation-in-part of U.S. Ser. No. 07/904,068 filed 23 Jun. 1992, which is a continuation-in-part of U.S. Ser. No. 07/853,408 filed 18 Mar. 1992, which is a continuation in part of U.S. Ser. No. 07/834,539, filed Feb. 5, 1992, which is a continuation-in-part of U.S. Ser. No. 07/810,279 filed Dec. 17, 1991, now U.S. Pat. No. 5,569,825 which is a continuation-in-part of U.S. Ser. No. 07/575,962 filed Aug. 31, 1990, now abandoned, which is a continuation-in-part of U.S. Ser. No. 07/574,748 filed Aug. 29, 1990, now abandoned. This application claims foreign priority benefits under Title 35, United States Code, Section 119, to PCT Application No. PCT/US91/06185 which corresponds to U.S. Ser. No. 07/834,539 filed Feb. 5, 1992 and PCT Application No. PCT/US92/10983.

FOREIGN-APPL-PRIORITY-DATA:

COUNTRY	APPL-NO	APPL-DATE
WO	PCT/US92/06185	August 28, 1991
WO	PCT/US92/10983	December 17, 1992

INT-CL: [6] C12N 15/00, A61K 39/00, C12P 19/34, C07K 16/00
US-CL-ISSUED: 435/172.3; 424/184.1, 435/91.1, 435/172.1, 530/387.1, 536/23.1, 536/23.53, 800/2, 935/19, 935/89, 935/93 , 935/103
US-CL-CURRENT: 435/452; 424/184.1, 435/91.1, 530/387.1, 536/23.1, 536/23.53
FIELD-OF-SEARCH: 800/2, 435/172.2, 435/240.2, 530/388.1

PRIOR-ART-DISCLOSED:

U.S. PATENT DOCUMENTS

Search Selected | Search ALL

	PAT-NO	ISSUE-DATE	PATENTEE-NAME	US-CL
☐	4643234	February 1987	Moore	530/388
☐	4683195	July 1987	Millis	435/6
☐	4965188	October 1990	Millis	435/6
☐	5047507	September 1991	Buchegger	530/387
☐	5175384	December 1992	Krimpenfort et al.	800/2
☐	5416260	May 1995	Koller	800/2
☐	5434340	July 1995	Krimpenfort et al.	800/2

FOREIGN PATENT DOCUMENTS

FOREIGN-PAT-NO	PUBN-DATE	COUNTRY	US-CL
0 315 062	May 1989	EPX	
WO 90/04036	April 1990	WOX	
901443	November 1990	WOX	
WO 90/12878	November 1990	WOX	
WO 91/00906	January 1991	WOX	
WO 91/10741	July 1991	WOX	
WO 92/03918	March 1992	WOX	

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ABSTRACT:

The invention relates to transgenic non-human animals capable of producing heterologous antibodies and transgenic non-human animals having inactivated endogenous immunoglobulin genes. In one aspect of the invention, endogenous immunoglobulin genes are suppressed by antisense polynucleotides and/or by antiserum directed against endogenous immunoglobulins. Heterologous antibodies are encoded by immunoglobulin genes not normally found in the genome of that species of non-human animal. In one aspect of the invention, one or more transgenes containing sequences of unrearranged heterologous human immunoglobulin heavy chains are introduced into a non-human animal thereby forming a transgenic animal capable of functionally rearranging transgenic immunoglobulin sequences and producing a repertoire of antibodies of various isotypes encoded by human immunoglobulin genes. Such heterologous human antibodies are produced in B-cells which are thereafter immortalized, e.g., by fusing with an immortalizing cell line such as a myeloma or by manipulating such B-cells by other techniques to perpetuate a cell line capable of producing a monoclonal heterologous antibody. The invention also relates to heavy and light chain immunoglobulin transgenes for making such transgenic non-human animals as well as methods and vectors for disrupting endogenous immunoglobulin loci in the transgenic animal.

21 Claims, 57 Drawing figures